

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**What is claimed is:**

1. (Currently Amended) A method of forming a ZnO nanorod array, which comprises:
  - coating on a substrate ZnO nanoparticles serving both as a buffer layer and a seed layer; and
  - growing the ZnO nanoparticles into crystals to form the ZnO nanorod array in a nutrient solution consisting of hexamethylenetetramine, at least one selected from the group consisting of Zn nitrate, Zn acetate, and a derivative thereof, and a solvent, wherein the substrate is made of Si, ~~sapphire (Al<sub>2</sub>O<sub>3</sub>), GaN, ScAlMgO<sub>4</sub>, or LiNbO<sub>3</sub>~~, wherein the operation of growing the ZnO nanoparticles in the nutrient solution is performed at 90 to 100 °C.
2. (Previously Presented) A method of forming a ZnO nanowall array, which comprises:
  - coating on a substrate ZnO nanoparticles serving both as a buffer layer and a seed layer; and
  - growing the ZnO nanoparticles into crystals to form the ZnO nanowall array in a nutrient solution consisting of sodium citrate, at least one selected from the group consisting of Zn acetate and its derivative, and a solvent, wherein the substrate is made of Si, sapphire (Al<sub>2</sub>O<sub>3</sub>), GaN, ScAlMgO<sub>4</sub>, or LiNbO<sub>3</sub>, wherein the operation of growing the ZnO nanoparticles in the nutrient solution is performed at 90 to 100°C.
3. (Cancelled)

4. (Previously Presented) The method of claim 1, wherein a volume ratio of Zn nitrate, Zn acetate, or a derivative thereof, to hexamethylenetetramine in the nutrient solution is 10:1 to 1:10.

5. (Previously Presented) The method of claim 2, wherein a volume ratio of Zn acetate or its derivative to sodium citrate in the nutrient solution is 10:1 to 1:10.

6. (Original) A ZnO nanorod array formed by the method of claim 1.

7. (Original) A ZnO nanowall array formed by the method of claim 2.

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) The method of claim 1, wherein the nutrient solution consists of hexamethylenetetramine, Zn nitrate and a solvent.

11. (Cancelled)

12. (Cancelled)

13. (Previously Presented) The method of claim 2, wherein the nutrient solution consists of Zn acetate, sodium citrate and a solvent.